RESTRICTED CIRCULATION

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Agricultural Memorandum No 788

Swede Mildew Trials

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Spraying trials for swede mildew were carried out at a number of centres in the years 1961–67.

The simplified criteria of Ag Mem 787 were tested on the amount of the disease reported on the control plots (unsprayed). The difficulty about interpreting such data is that the efficiency, or otherwise, of control on the sprayed plots, will affect the infection hazard of the unsprayed plot.

The table gives details of the mildew percentage 15 weeks after sowing date, the potential transpiration and rainfall June to August, and the number of weeks with air maxima over 74°F and over 76°F (D). The index in the last column is R–PT + 2D.

The results are generally satisfactory except for the unexpected 37% mildew at Cambridge in 1966, and the low incidence at Rosewarne the same year.

Nevertheless for an assessment of suitable mildew weather at a given site, as distinct from a regional danger signal, it is probably more useful to return to the weekly analysis explained in Ag Mem 786.

There was a high incidence of mildew at all centres in 1975 as would have been deduced from the indices shown in the table, with values 16–20.

Mildew	Site and Year	P.T.	Rain	Diff	Warm weeks ≥75°	Warm weeks ≥77°	Index
85%	Bramham 1964	9.25	5.15	4.1	5	4	12.1
50%	Cambridge 1964	10.20	6.10	4.1	9	8	20.1
37%	Cambridge 1966	9.90	7.90	2.0	3	2	6.0
>25%	Bramham 1967	10.05	6.55	3.5	4	2	7.5
20%	N. Abbot 1961	10.95	5.25	5.7	4	2	9.7
>15%	Rosewarne 1964	9.65	3.45	6.2	5	4	14.2
15%	Rosewarne 1961	10.85	4.05	6.8	2	2	10.8
5%	Cambridge 1965	9.30	7.00	2.3	1	0	2.3
5%	Harpenden 1965	8.95	8.45	0.5	1	0	0.5
5%	Bramham 1961	9.45	6.35	3.1	2	2	7.1
little	N. Abbot 1962	10.30	5.90	4.4	1	1	6.4
trace	Bramham 1965	8.80	4.80	4.0	0	0	4.0
	Bramham 1966	8.75	9.55	-0.8	0	0	-0.8
	Cambridge 1963	9.60	8.00	1.6	3	3	7.6
	Rosewarne 1966	9.40	6.70	2.7	3	3	8.7
	Harpenden 1962	10.35	5.25	5.1	2	0	5.1
	Cockle Park 1961	8.50	8.40	0.1	2	2	4.1
nil	Rosewarne 1965	9.50	5.60	3.9	2	1	5.9
	Harpenden 1963	9.50	8.60	0.9	3	3	6.9
High	Cardiff 1975	11.45	4.55	6.9		6	18.9
	N. Abbot 1975	11.65	3.35	8.3		4	16.3
	Harpenden 1975	12.25	2.65	9.6		5	19.6
	Shardlow 1975	12.05	3.75	8.3		6	20.3
	Rosewarne 1975	11.15	4.85	6.3		6	18.3

Any comments or suggestions on this paper should be referred to the author.

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February 1976

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